

IN THE CLAIMS:

Please amend the claims as follows:

1-88. (Cancelled)

89. (New) A method for configuring a graphical user interface (GUI) element to subscribe to a data source, the method comprising:

- displaying a first GUI element on a display of a first computer system;
- receiving user input specifying a data source with which to associate the first GUI element;

- in response to said receiving user input, automatically configuring the first GUI element to receive and display data from the specified data source;

- the first computer system receiving data from the specified data source, wherein the data includes information specifying a first data type of the data;

- automatically determining that the first GUI element cannot display data of the first data type;

- automatically substituting a second GUI element for the first GUI element, wherein the second GUI element can display data of the first data type; and

- displaying the received data from the specified data source on the second GUI element.

90. (New) The method of claim 89

- wherein the data source is located remotely from the first computer system and is coupled to the first computer system over a network, wherein the data source is specified using a URL; and

- wherein said automatically configuring the first GUI element to receive and display data from the specified data source comprises:

- automatically configuring the GUI element to connect to the data source.

91. (New) The method of claim 89, wherein the GUI element is automatically configured without user programming.

92. (New) The method of claim 89, wherein the GUI element is automatically configured without user input specifying source code for this operation

93. (New) The method of claim 89,
wherein said receiving user input specifying the data source comprises receiving user input via a user interface dialog box.

94. (New) The method of claim 89, further comprising:
the GUI element performing said receiving and displaying data from the specified data source, wherein said performing is performed after said automatically configuring.

95. (New) The method of claim 89,
wherein the data source is comprised in a second computer system remotely located from the first computer system, wherein the first computer system is operable to connect to the second computer system over a network; and
wherein said automatically configuring the GUI element comprises automatically configuring the GUI element to connect to the second computer and perform said receiving and displaying data from the specified data source.

96. (New) The method of claim 89, wherein the GUI element is associated with a first computer program;

wherein said displaying the GUI element comprises including the GUI element in a user interface associated with the first computer program; and

wherein said user input specifying the data source is received during development of the first computer program.

97. (New) The method of claim 96, wherein, during execution of the first computer program, the GUI element is operable to perform said receiving and displaying data from the specified data source.

98. (New) The method of claim 96, further comprising:
executing the first computer program after said automatically configuring, wherein said executing the first computer program includes the GUI element performing said receiving and displaying data from the specified data source.

99. (New) The method of claim 96,
wherein the first computer program is a graphical program comprising a plurality of interconnected nodes that visually represent functionality of the first computer program.

100. (New) The method of claim 89, wherein the data source is one from the group consisting of:

- an HTTP server;
- an FTP server;
- an OPC server;
- an SNMP server;
- a DataSocket server; and
- a file.

101. (New) The method of claim 101,
wherein the first data source is a remote data source associated with a remote computer; and

wherein said automatically configuring the GUI element comprises automatically configuring the GUI element to connect to the remote data source and receive and display data from the remote data source during program execution.

102. (New) The method of claim 101, further comprising:

executing a computer program operable to publish live data to the remote data source;

wherein the GUI element is operable to display the live data published by the computer program.

103. (New) The method of claim 89,
wherein the data is live data.

104. (New) The method of claim 103,
wherein the data comprises measurement data.

105. (New) A memory medium that stores program instructions for configuring a graphical user interface (GUI) element to subscribe to a data source, the method comprising:

displaying a first GUI element on a display of a first computer system;

receiving user input specifying a data source with which to associate the first GUI element;

in response to said receiving user input, automatically configuring the first GUI element to receive and display data from the specified data source;

the first computer system receiving data from the specified data source, wherein the data includes information specifying a first data type of the data;

automatically determining that the first GUI element cannot display data of the first data type;

automatically substituting a second GUI element for the first GUI element, wherein the second GUI element can display data of the first data type; and

displaying the received data from the specified data source on the second GUI element.

106. (New) A method for configuring a graphical user interface (GUI) element to subscribe to a data source, the method comprising:

- displaying a first GUI element on a display of a first computer system;
- receiving user input specifying a data source with which to associate the first GUI element;
- in response to said receiving user input, automatically configuring the first GUI element to receive and display data from the specified data source;
- the first computer system receiving data from the specified data source, wherein the data includes information specifying a first data type of the data;
- automatically determining if the first GUI element can display data of the first data type; and
- indicating an invalid condition if the first GUI element cannot display data of the first data type.

107. (New) The method of claim 106

- wherein the data source is located remotely from the first computer system and is coupled to the first computer system over a network, wherein the data source is specified using a URL; and

- wherein said automatically configuring the first GUI element to receive and display data from the specified data source comprises:

- automatically configuring the GUI element to connect to the data source.

108. (New) The method of claim 106, wherein the GUI element is automatically configured without user programming.

109. (New) The method of claim 106, wherein the GUI element is automatically configured without user input specifying source code for this operation

110. (New) The method of claim 106,

- wherein said receiving user input specifying the data source comprises receiving user input via a user interface dialog box.

111. (New) The method of claim 106, further comprising:
the GUI element performing said receiving and displaying data from the specified data source, wherein said performing is performed after said automatically configuring.

112. (New) The method of claim 106,
wherein the data source is comprised in a second computer system remotely located from the first computer system, wherein the first computer system is operable to connect to the second computer system over a network; and
wherein said automatically configuring the GUI element comprises automatically configuring the GUI element to connect to the second computer and perform said receiving and displaying data from the specified data source.

113. (New) The method of claim 106, wherein the GUI element is associated with a first computer program;
wherein said displaying the GUI element comprises including the GUI element in a user interface associated with the first computer program; and
wherein said user input specifying the data source is received during development of the first computer program.

114. (New) The method of claim 113, wherein, during execution of the first computer program, the GUI element is operable to perform said receiving and displaying data from the specified data source.

115. (New) The method of claim 113, further comprising:
executing the first computer program after said automatically configuring, wherein said executing the first computer program includes the GUI element performing said receiving and displaying data from the specified data source.

116. (New) The method of claim 113,

wherein the first computer program is a graphical program comprising a plurality of interconnected nodes what visually represent functionality of the first computer program.

117. (New) The method of claim 106, wherein the data source is one from the group consisting of:

- an HTTP server;
- an FTP server;
- an OPC server;
- an SNMP server;
- a DataSocket server; and
- a file.

118. (New) The method of claim 106,
wherein the first data source is a remote data source associated with a remote computer; and

wherein said automatically configuring the GUI element comprises automatically configuring the GUI element to connect to the remote data source and receive and display data from the remote data source during program execution.

119. (New) The method of claim 118, further comprising:
executing a computer program operable to publish live data to the remote data source;

wherein the GUI element is operable to display the live data published by the computer program.

120. (New) The method of claim 106,
wherein the data is live data.

121. (New) The method of claim 103,
wherein the data comprises measurement data.

122. (New) A memory medium that stores program instructions for configuring a graphical user interface (GUI) element to subscribe to a data source, the method comprising:

- displaying a first GUI element on a display of a first computer system;
- receiving user input specifying a data source with which to associate the first GUI element;

- in response to said receiving user input, automatically configuring the first GUI element to receive and display data from the specified data source;

- the first computer system receiving data from the specified data source, wherein the data includes information specifying a first data type of the data;

- automatically determining if the first GUI element can display data of the first data type; and

- indicating an invalid condition if the first GUI element cannot display data of the first data type.